

AMENDMENTS TO THE SPECIFICATION

On page 1, before (numbered) line 2, insert the following heading:

BACKGROUND AND SUMMARY

On page 3, after line 5, insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 3, after line 14, insert the following heading:

DETAILED DESCRIPTION OF EXAMPLE EMBODIMENTS

Please replace the paragraph beginning at page 4, line 16 with the following amended paragraph:

Referring now to FIG. 2A, there is shown a conveyor system 20 that transports a strip of precursor ceramic tape 21 to a cylindrical rod 23. The conveyor system 20 includes rollers 201 and support surfaces 202 that guide the strip 21 close to the rod ~~[[former]]~~ 23. A smoothly contoured surface 204 directs the tape 21 under the rod 23. When positioned at the conveyor system 20, an end block 231 supports the distal end of the rod to prevent it from bending and provides a rotary drive for rotating the rod 23 and a linear drive for translating the rod 23. After a stub ~~[[tap]]~~ 211 of the tape 21 of sufficient length has passed a first pneumatically operated clamp 241 closes and fixes the tape 21 against the rod 23. Then the rod 23 is rotated and translated as indicated,

while more tape is pushed through the conveyor system 20. Thus the end block 231 ~~[[23]]~~ and the conveyor system 20 act as ~~[[the]]~~ a first mechanism for moving the tape 21 and the rod 23 relatively to each other.

Please replace the paragraph beginning at page 5, line 7 with the following amended paragraph:

In FIG. 2B, the winding process of FIG. 2A is shown at a later stage with the tape 21 being wound around the rod ~~[[former]]~~ 23 for approximately half of its length. As the first clamp 241 is retracted from the conveyor system 20, a second spring-loaded clamp 242 is brought from below into contact with the tape. The second clamp has a slightly concave surface with a stop pin 243. The concave surface maintains pressure on the tape while the stop pin 243 prevents the slippage of tape along the rotating rod 23, thus ensuring that the helix remains tightly wound.

Please replace the paragraph beginning at page 5, line 14 with the following amended paragraph:

After the strip of tape 21 is fully wound around the rod ~~primary-former~~ 23, the second end of the tape forms a second short stub (not shown) similar to the stub 211. The rod 23 is then moved by the linear drive of the block 231 to a second forming element. During the transport both clamps 241, 242 remain in place.

Please replace the paragraph beginning at page 5, line 18 with the following amended paragraph:

At the location of the second former 33, two clamps 351, 352 grip the tape at the stubs 211 as illustrated in FIG. 3A. The previous clamps 241, 242 are released and the forming rod 23 is moved in axial direction in sliding contact with an edge 353. The rod ~~first former~~ 23 is shown as a dashed outline. The first clamp 351 is fixed to the mounting block 331 that carries the second former 33. It pushes the stub 211 at one end of the tape 21 against the outer edge of the inner cylinder 332 of the second former 33. The combined clamp 351 and second former 33 are simultaneously rotated around the center axis of the cylindrical second former 33 and moved towards the second clamp 352 that rests immobile during this movement. Thus, the first clamp 351 and the second clamp 352 form the a second mechanism for moving said pre-formed tape and second forming element relatively to each other. As the second former 33 approaches the second clamp, more of the rod 23 slides over an edge 353 and more windings are pushed from the distal end of the rod. The windings are wound around the inner cylinder 332 of the rotating secondary former 33 until the tape is completely stripped of the primary former. At this stage, which is illustrated in FIG. 313, the pre-formed tape 21 is wound completely around the inner cylinder 332 of second former 33 and held in place by the two clamps 351, 352.

Please replace the paragraph beginning on page 6, line 16, with the following amended paragraph:

In FIG. 4, the secondary former 33 is shown approaching an ~~[[a]]~~ array 40 of saggars 41. As the secondary former meets a sagger 41, the front face of its inner cylinder 332 (shown in FIG. 3 above) engages a matching cylinder 432 ~~[[431]]~~ within a recess area 43 ~~[[432]]~~ of a sagger 41. As the secondary former moves closer to a sagger, the spring-loaded inner cylinder 332 remains stationary and the outer ring 333 pushes the twice-coiled helix into the recess area 43 ~~[[432]]~~ of the sagger. The clamps that grip the stubs or ends of the tape open to release the helix. The outer boundary of the recess area 43 ~~[[432]]~~ has a diameter that closely matches the nominal outer diameter of the major helix of the actuator. The edges of the boundary of the recess area are contoured or chamfered to assist the placing of the tape into the sagger. The sagger array 40 filled with fully formed green tape is then placed in a heated environment for drying and prepared for further processing stages such as sintering in an oven.

Please replace the Abstract with the amended Abstract in the Appendix hereto.